

**Notice of Allowability**

Application No.

10/811,658

Applicant(s)

VRANA ET AL.

Examiner

Katherine W. Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/30/2005.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 29 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413)  
Paper No./Mail Date with amendment
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other 7 and 8 same document.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Applicant's claim amendments and explanation have been accepted as corresponding to the drawings as filed, and thus the drawing objection is cancelled.
3. Authorization for this examiner's amendment was given in a telephone interview with Mr. G. DeGrazia on June 17-24, 2005.
4. The application has been amended as follows:

**In the Claims:**

**Claim 1** has been amended to delete everything after "comprising:" in line 2 and replace it with:

--a central pilot portion having an end face and a bore extending through said end face through said pilot portion;

a flange portion on at least opposed sides of said pilot portion having a generally planar panel support face generally parallel to said end face of said pilot portion; and

at least one groove in said panel support face of said flange portion adjacent said pilot portion, said at least one groove including an inclined inner side wall defining an outer face of said pilot portion, an inclined outer side wall and a V-shaped bottom wall, said inner side wall inclined outwardly from said bottom wall toward said

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flange portion and said outer side wall inclined inwardly from said bottom wall toward said pilot portion forming an opening of said at least one groove adjacent said panel support face having a width less than a width of said at least one groove at said bottom wall, and said V-shaped bottom wall having generally equal opposed relatively inclined bottom faces defining sides of an equilateral triangle having an apex extending away from a plane of said panel support face generally equally spaced between said inner and outer side walls of said at least one groove.--

**Claim 2** has been amended to delete everything after "Claim 1, wherein" in lines 1-2 and replace it with:

--said bottom faces of said V-shaped bottom wall are inclined relative to said generally planar panel support face at an angle of between 15 and 25 degrees. --

**Claim 4**, line 2, "of said V-shaped bottom wall" has been deleted.

**Claim 5** has been amended to delete everything after "Claim 1, wherein" in lines 1-2 and replace it with:

--said flange portion is rectangular, including said panel support face on opposed sides of said pilot portion, and said at least one groove comprises linear grooves on opposed sides of said pilot portion, and said female fastener further includes a back face, opposite said panel support face of said flange portion, said back face of said fastener including semi-circular grooves adapted to receive frangible connector elements aligned with said apex of said V-shaped bottom wall.--

**Claim 6**, line 5, has been amended to insert --at least one-- between "said" and "groove".

**Claim 7**, line 4, --and-- has been inserted between "face" and "through".

**Claim 7**, line 6, --a-- has been inserted between "having" and "generally".

**Claim 7**, lines 8-17, "linear grooves on opposed sides of said pilot portion in said panel support faces of said flange portions, said grooves each having a generally planar inclined inner side wall defining outer faces of said pilot portion, a generally planar inclined outer side wall and a V-shaped bottom wall, said inner side wall inclined outwardly from said bottom wall toward said outer side wall and said outer side wall inclined inwardly from said bottom wall toward said inner side wall to adjacent said panel support faces of said flange portions forming a restricted opening to said grooves having a width adjacent said panel support faces less than a width of said groove adjacent said V-shaped bottom wall, and said V-shaped bottom wall including relatively inclined bottom faces having an apex extending away from said panel support faces of said flange portion." **has been deleted and the following has been inserted in its place:**

--linear grooves on opposed sides of said pilot portion in said panel support faces of said flange portions, said grooves each having a generally planar inclined inner side wall defining outer faces of said pilot portion, a generally planar inclined outer side wall and a V-shaped bottom wall, said inner side wall inclined outwardly from said bottom wall toward said outer side wall, and said outer side wall inclined inwardly from said bottom wall toward said inner side wall; said panel support faces of said flange portions forming a restricted opening to each of said linear grooves; each said restricted opening having a width adjacent said panel support faces less than a width of said groove

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adjacent said V-shaped bottom wall, and said V-shaped bottom wall including relatively inclined bottom faces forming an apex extending away from said panel support faces of said flange portions.

**Claim 9**, line 3, has been amended to delete "linear" and insert in its place -- semi-circular-- and line 4 has been amended to delete "of said bottom faces of said V-shaped bottom wall".

**Claim 11**, line 2, has been amended to delete "linear grooves" and insert in its place --V-shaped bottom wall--.

**Claim 12**, line 2, has been amended to delete "of" and insert --formed by-- immediately before "said bottom faces" and line 2 has also been amended to delete "are" and to insert in its place --is--.

**Claim 13**, line 2, has been amended to delete "of" and insert --formed by-- immediately before "said bottom faces" and line 2 has also been amended to delete "linear grooves have" and to insert in its place --V-shaped bottom wall has--.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches numerous self attaching female fasteners, including those taught by Ladouceur 3810291 and 4971499, Ladouceur et al USP 3724520 and USPAP 20050013679, Pouch et al USP 3926236, Zahodiakin USP 3282315, Couillais et al USPAP 20040086355, and Ross et al USPAP 20040202524. In particular, Ladouceur et al USPAP 20050013679 was considered, as it has the grooves with the inclined inner and outer walls and an opening narrower than the width of the groove at its bottom wall. In addition Ladouceur et al USPAP 20050013679 had an arcuate, in

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particular, a semi-circular, projection at the bottom wall which also extended away from the plane of the panel support face.

However, applicant is specific in teaching the importance of re-entrant grooves, that the shape of the groove is critical, including the slant of the inner and outer sidewalls, the fact that the opening of the groove must be narrower than the width of the groove at the bottom V-shaped wall, and the fact that the bottom V-shaped wall has opposed relatively inclined bottom faces forming an apex extending away from the panel support face(s). Thus examiner has given great weight to the shape of this at least one groove, in particular its V-shaped bottom wall, including either relatively inclined bottom faces defining the sides of an equilateral triangle having an apex, or relatively inclined bottom faces forming an apex. Further, applicant noted that the depth of the groove was critical, as a groove that is too deep can penetrate or damage thinner substrates on which it is attached. Thus the V-shaped bottom wall with an apex extending away from the planar surface has clear advantages over a flat bottom wall with a semi-circular recess extending away from the planar surface. The applicant and the prior art are both clear that small changes in the shape greatly affect the gripping strength of the fastener, and thus examiner cannot argue that a change in the shape of the groove(s) is a mere design choice, as numerous patents have issued based on minor changes in the shape and size of the groove(s). To state that the claimed slanted inner and outer sidewalls of the groove, with its V-shaped bottom wall including relatively inclined bottom faces having an apex is an obvious variant over other grooves

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having semicircular recessed, flat, or various curved bottoms would result in examiner basing such obviousness on hindsight.

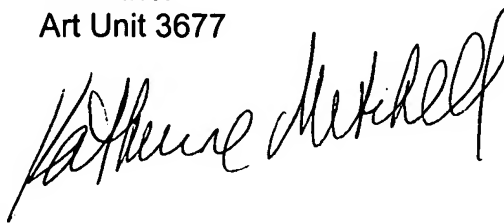
5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell  
Examiner  
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Kwm  
6/24/2005